

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 January 2005 (06.01.2005)

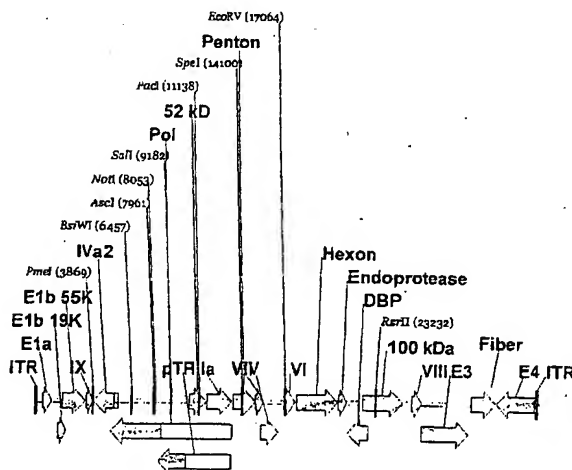
PCT

(10) International Publication Number
WO 2005/001103 A3

- (51) International Patent Classification⁷: C12N 15/86, 5/10, 7/01, C07K 14/075, A61K 39/235, 48/00, C12N 15/34
- (21) International Application Number: PCT/US2004/016614
- (22) International Filing Date: 15 June 2004 (15.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/465,302 20 June 2003 (20.06.2003) US
60/566,212 28 April 2004 (28.04.2004) US
60/575,429 28 May 2004 (28.05.2004) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 10/465,302 (CIP)
Filed on 20 June 2003 (20.06.2003)
- (71) Applicant (for all designated States except US): THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA [US/US]; 3160 Chestnut Street, Suite 200, Philadelphia, PA 19104 (US).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): ROY, Soumitra [US/US]; 240 Pugh Road, Wayne, PA 19087 (US). WILSON, James, M. [US/US]; 1350 N. Avignon Drive, Gladwyne, PA 19035 (US).
- (74) Agents: KODROFF, Cathy, A. et al.; Howson and Howson, Spring House Corporate Center, P.O. Box 457, Spring House, PA 19477 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: METHODS OF GENERATING CHIMERIC ADENOVIRUSES AND USES FOR SUCH CHIMERIC ADENOVIRUSES



Simian Adenovirus
34302 bp

(57) Abstract: A method for providing an adenovirus from a serotype which does not grow efficiently in a desired cell line with the ability to grow in that cell line is described. The method involves replacing the left and right termini of the adenovirus with the corresponding termini from an adenovirus which grow efficiently in the desired cell line. At a minimum, the left terminus spans the (5') inverted terminal repeat, the left terminus spans the E4 region and the (3') inverted terminal repeat. The resulting chimeric adenovirus contains the internal regions spanning the genes encoding the penton, hexon and fiber from the serotype which does not grow efficiently in the desired cell. Also provided are vectors constructed from novel simian adenovirus sequences and proteins, host cells containing same, and uses thereof.

BEST AVAILABLE COPY

WO 2005/001103 A3